

for determining the test life of the cartridges.

(b) Where two cartridges are used in parallel on a chemical cartridge respirator, the bench test will be performed with the cartridges arranged in parallel, and the test requirements will apply to the combination rather than to the individual cartridges.

(c) Three cartridges or pairs of cartridges will be removed from containers and tested as received from the applicant.

(d) Two air purifying cartridges or pairs of cartridges will be equilibrated at room temperature by passing 25 per-

cent relative humidity air through them at the flow rate of 25 liters per minute (l.p.m.) for 6 hours.

(e) Two air purifying cartridges or pairs of cartridges will be equilibrated by passing 85 percent relative humidity air through them at the flow rate of 25 l.p.m.

(f) All cartridges will be resealed, kept in an upright position, at room temperatures, and tested within 18 hours.

(g) Cartridges will be tested and shall meet the minimum requirements set forth in Table 11 of this subpart.

TABLES TO SUBPART L OF PART 84

TABLES 9–10 [RESERVED]

TABLE 11—CARTRIDGE BENCH TESTS AND REQUIREMENTS

[42 CFR part 84, subpart L]

Cartridge	Test condition	Test atmosphere		Flowrate (l.p.m.)	Number of tests	Penetra- tion ¹ (p.p.m.)	Minimum life ² (min.)
		Gas or vapor	Concentra- tion (p.p.m.)				
Ammonia	As received	NH ₃	1000	64	3	50	50
Ammonia	Equilibrated	NH ₃	1000	32	4	50	50
Chlorine	As received	Cl ₂	500	64	3	5	35
Chlorine	Equilibrated	Cl ₂	500	32	4	5	35
Hydrogen chlo- ride.	As received	HCl	500	64	3	5	50
Hydrogen chlo- ride.	Equilibrated	HCl	500	32	4	5	50
Methylamine	As received	CH ₃ NH ₂	1000	64	3	10	25
Methylamine	Equilibrated	CH ₃ NH ₂	1000	32	4	10	25
Organic vapors ..	As received	CCl ₄	1000	64	3	5	50
Organic vapors ..	Equilibrated	CCl ₄	1000	32	4	5	50
Sulfur dioxide	As received	SO ₂	500	64	3	5	30
Sulfur dioxide	Equilibrated	SO ₂	500	32	4	5	30

¹ Minimum life will be determined at the indicated penetration.

² Where a respirator is designed for respiratory protection against more than one type of gas or vapor, as for use in ammonia and in chlorine, the minimum life shall be one-half that shown for each type of gas or vapor. Where a respirator is designed for respiratory protection against more than one gas of a type, as for use in chlorine and sulfur dioxide, the stated minimal life shall apply.

Subpart M [Reserved]

Subpart N—Special Use Respirators

§ 84.250 Vinyl chloride respirators; de- scription.

Vinyl chloride respirators, including all completely assembled respirators which are designed for use as respiratory protection during entry into and escape from vinyl chloride atmospheres containing adequate oxygen to support life, are described according to their construction as follows:

(a) Front-mounted or back-mounted gas masks;

(b) Chin-style gas masks;

(c) Chemical-cartridge respirators;

(d) Powered air-purifying respirators; and

(e) Other devices, including combination respirators.

§ 84.251 Required components.

(a) Each vinyl chloride respirator described in § 84.250 shall, where its design requires, contain the following component parts:

(1) Facepiece;